



ENVIRONMENTAL SERVICES DEPARTMENT

AIR QUALITY DIVISION

1001 N. Central Avenue
Phoenix, Arizona 85004

Technical Guidance # 04-001

Rule: Rule 311, Section 502.2

November 17, 2004

Issues:

How can furniture manufacturers keep records in a manner that will allow them to monitor for compliance with the requirements of Rule 311?

Discussion:

The furniture manufacturing/woodworking industry is subject to the requirements of Rule 311 because they emit particulate matter into the atmosphere that is not more specifically regulated by another Rule under Regulation III of the Maricopa County Air Pollution Control Rules and Regulations.

The Department has determined that the affected operation subject to the requirements of Rule 311 is the overall woodworking operation and not each individual cut, sanding, etc.

To monitor for compliance with the Rule, the amount of material processed and the amount of particulate matter emitted must be known. For Rule 311, the Department believes that the daily or monthly material usage requirements for the furniture manufacturer/woodworking industry can be adequately demonstrated using delivery records. For the purpose of monitoring for compliance with Rule 311, the Department also will assume that emissions from the baghouses at woodworking facilities vary linearly with the production rate. The US Environmental Protection Agency has reviewed this approach.

Conclusions:

The following procedure for woodworking operations controlled by baghouses provides a mechanism for furniture manufacturers to meet the recordkeeping requirements of Rule 311 §502.2 and monitor for compliance with the requirements of Rule 311 §301. All monthly records must be logged and all calculations performed and logged by the 15th of the following month. A zero will be entered as appropriate if no wood was received or no woodworking equipment was operated on any particular day.

1. Weight records of wood material receipts are gathered as they occur. The weight for each shipment for the previous month must be entered in a log along with the total weight expressed in tons. Prefabricated wood not subject to any woodworking operations shall not be included in the records.
2. Records will be maintained of the number of hours that woodworking operations were conducted. The daily hours that woodworking operations were conducted for the previous month will be entered in a log and totaled.
3. The process weight rate, P, will be calculated by dividing the total wood received for the previous month from item 1 by the total hours of operation from item 2. Log the result.
4. The actual emission rate is calculated next. First, divide the actual process rate from item 3 by the process rate that the facility was operating at during the most recent Department approved emission rate test on the baghouses. Next multiply the result by the emission rate that was measured during the same Department approved baghouse test. Log the result.
5. The allowable emission rate is calculated by entering the process weight rate from item 3 into the appropriate equation from Rule 311 §301. Log the answer.
6. Compare the results of item 4 with the results of item 5 to monitor for compliance.

This intent of this guidance document is to present a method that the Department would find acceptable. It is not intended to be the only acceptable method.

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